



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,518	03/25/2004	Hiroshi Harada	0425-1029PUS2	5545

2292 7590 07/19/2005

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

JOHNSON, STEPHEN

ART UNIT PAPER NUMBER

3641

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/808,518	HARADA ET AL.	
	Examiner	Art Unit	
	Stephen M. Johnson	3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-13 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/5/2004; 10/20/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3641

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-12, drawn to an igniter assembly, classified in class 102, subclass 202.9.
 - II. Claim 13, drawn to a method of making an igniter, classified in class 102, subclass 202.14.
2. The inventions are distinct, each from the other because:
3. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the igniter assembly could be made by a different method such as casting or melting the resin between the housing collar and the igniter.
4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized different search and divergent subject matter, restriction for examination purposes as indicated is proper.
5. Applicant is advised that the reply to this requirement to be complete **must include an election of the invention to be examined** even though the requirement be traversed (37 CFR 1.143).
6. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 8; and in claim 2, lines 4-5; the phrase "a collar main body portion"

Art Unit: 3641

should be claimed as (said collar main body portion) if the previously claimed collar main body portion is intended. In claim 4, lines 9, 13, and 14, whose surfaces are intended by the claimed “an outer surface” and “an inner surface”? In claims 8, 9, 10, and 13, the phrase “a resin” should be claimed as (said resin) if the previously claimed resin is intended. In claim 8, lines 10-12, what helium leakage quantity is prescribed in JIS Z2331 and how is this quantity or the associated authority intended to limit applicant’s claim language? In claim 8, line 12, use of terminology in parenthesis (air conversion) makes the claims indefinite as to whether or not this terminology is or is not intended to be limiting to the claims. In claim 9, lines 3-4, the phrase “the collar main body portion” lacks an antecedent. In claim 10, line 3, whose surface is intended by the phrase “an outer surface”?

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 8-11, 12/8, and 13 are rejected under 35 U.S.C. 112, first paragraph, as **failing to comply with the written description requirement**. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 8 claims “such a strength as slightly deforms on receiving injection pressure” without specifying (in the written specification) what particular strength of the disclosed materials provides this function of slightly deforming on receiving injection pressure.

Art Unit: 3641

9. Claims 8-11, 12/8, and 13 are rejected under 35 U.S.C. 112, first paragraph, as **failing to comply with the enablement requirement**. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 8 claims "such a strength as slightly deforms on receiving injection pressure" without specifying (in the written specification) what particular strength of the disclosed materials provides this function of slightly deforming on receiving injection pressure.

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-2, 4, 6, 8-10, and 12-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Avetisian.

Avetisian discloses an igniter assembly comprising:

- | | |
|--------------------------------------|-------------------------|
| a) an igniter; | 8, 12 |
| b) a cylindrical metal collar; | 4; col. 1, lines 65-67 |
| c) a resin; | 6; col. 2, lines 14-15 |
| d) a collar main body portion; | 16 |
| e) a cylindrical protruding portion; | 24 or between 24 and 16 |
| f) a cylindrical stepped portion; | 26 |

Art Unit: 3641

- | | |
|--|--|
| g) a circular inwardly protruding portion; | innermost portion of 16
(adjacent entry of 12 into 6) |
| h) a circular stepped portion; and | innermost portion of 16
(adjacent entry of 12 into 6) |
| i) a specified leakage value. | col. 3, lines 1-5 |

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 3, 7, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Avetsian in view of Dietzel et al..

Avetsian applies as previously recited. However, undisclosed is a metal casing comprised of alumunim. Dietzel et al. teach a metal casing comprised of aluminum (col. 2, lines 59-61). Applicant is substituting one material type of casing for another as explicitly encouraged by both the primary reference (Avetisian (col. 1, lines 65-66)) and the secondary reference (Dietzel et al. (col. 2, lines 59-61)). It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Dietzel et al. to the Avetsian igniter assembly and have an igniter assembly with a housing or casing of a different material type.

14. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Avetsian in view of Fogle Jr..

Avetsian applies as previously recited. However, undisclosed is a metal casing comprised

Art Unit: 3641

of iron. Fogle Jr. teaches a metal casing comprised of iron (col. 7, lines 63-66; col. 9, lines 36-37). Applicant is substituting one material type of casing for another as explicitly encouraged by both the primary reference (Avetisian (col. 1, lines 65-66)) and the secondary reference (Fogle Jr. (col. 9, lines 36-37)). It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Fogle Jr. to the Avetsian igniter assembly and have an igniter assembly with a housing or casing of a different material type.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Page 758 of the Condensed Chemical Dictionary (Hawley) is provided as evidence that nylon is considered to be a synthetic resin.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Johnson whose telephone number is 571-272-6877. The examiner can normally be reached on Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. As of July 15, 2005, the fax phone number for the organization where this application or proceeding is assigned will change to 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 800-786-9199.



STEPHEN M. JOHNSON
PRIMARY EXAMINER

Stephen M. Johnson
Primary Examiner
Art Unit 3641